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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,704	02/26/2002	Gabor Devenyi	01W120	6376

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EXAMINER
HANSEN, COLBY M

ART UNIT	PAPER NUMBER
3682	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/084,704	DEVENYI, GABOR	
	Examiner	Art Unit	
	Colby Hansen	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 17-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 5-11, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan (US Pat. 6,459,844) in view of Schwanz et al (US Pat. 4,227,426).

Pan (US Pat. 6,459,844) discloses a leadscrew assembly comprising a leadscrew 24 operable to rotate about a rotational axis to linearly drive a driven structure and comprising an elongated shaft having an outer lateral surface and a rotational axis, and a linear slide mechanism18,28 to which a drive nut housing 30 is affixed so that the drive nut housing does not rotate including an optical filter supported on the linear slide mechanism, the optical filter 12 being movable by a rotation of the leadscrew.

However Pan (US Pat. 6,459,844) does not disclose the use of a hollow nut with spring pin for engaging a screw assembly or the use of helically wrapped wire.

Schwanz et al (US Pat. 4,227,426) discloses a screw assembly comprising:

A screw 1 comprising:

a cylindrical elongated shaft having an outer lateral surface and a rotational axis, and

a screw thread 3;

a hollow drive nut housing 6 comprising;

a nut bore having an unthreaded inner surface with the screw being inserted through the nut bore, the nut bore being sized such that the screw may rotate therein about the rotational axis, and

a spring pin 7 affixed to the drive nut housing and spanning across the nut bore to engage the screw thread;

the spring pin 7 has a first end, a central portion, and a second end, and wherein the first end and the second end are each affixed to the drive nut housing (at the end of slots 10);

the first spring pin retainer and the second spring pin retainer each comprise openings in the drive nut housing (at the end of slots 10);

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the hollow nut with spring pin for engaging a screw assembly and the use of helically wrapped wire between the screw and nut as taught by Schwanz et al (US Pat. 4,227,426) within the screw/nut actuated optical filter mechanism of Pan so as to have a relatively inexpensive arrangement for transferring forces between a nut and screw shaft as well as to serve as a simple overload protection between the relatively rotating screw and nut, as suggested by Schwanz et al (US Pat. 4,227,426) (col. 1/lines 44-47 & 53-58).

Claims 1, 2, 4, 12-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan (US Pat. 6,459,844) in view of Schwanz et al (US Pat. 4,227,426), as applied to claims 1, 3, 5-11, and 18-21 above, and further in view of Devenyi (US Pat. 5,636,549).

Pan in view of Schwanz et al. discloses the claimed invention except for a circular cross section thread wire helically wrapped in spaced-apart turn upon the lateral surface and affixed to

an elongated shaft with a spacer wire having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread.

Devenyi (US Pat. 5,636,549) discloses a leadscrew comprising an elongated shaft 24 having an outer lateral surface and a rotational axis, and a leadscrew thread comprising a thread wire 16 helically wrapped in spaced-apart turns upon the lateral surface and affixed to the elongated shaft; a spacer wire 17 having a size smaller than that of the thread wire and helically interwrapped about the elongated shaft with the thread wire; a thread wire that has a circular cross section (fig. 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the helical wire thread of Devenyi (US Pat. 5,636,549) within Pan (US Pat. 6,459,844) so as to form a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

Response to Arguments

Applicant's arguments filed 4/12/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that Schwanz is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Swanz is clearly in the field of endeavor as it relates to a screw/nut interaction. Whether it is used in the context of a linear

actuated screw or a linear actuated nut, the microcosm that is the direct mechanical relationship between the screw and nut is relevant, and therefor applicable within the 35 USC 103 rejections. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the instant case, there clearly is motivation to combination Pan and Swanz in order to have a relatively inexpensive arrangement for transferring forces between a nut and screw shaft as well as to serve as a simple overload protection between the relatively rotating screw and nut as suggested by Schwanz et al (US Pat. 4,227,426) (col. 1/lines 44-47 & 53-58). With regard to incorporating the Devenyi reference, the motivation would be to form a hard, smooth thread comprising a wear-resistant running surface for engagement with a bearing nut member as suggested by Devenyi (US Pat. 5,636,549).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(571) 273-8300**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MEP. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile

transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MEP. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 872-9306) on _____

(Date)

Typed or printed name of person signing this certificate:

_____

_____

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MEP. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the

processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colby Hansen whose telephone number is (571) 272-7105. The examiner can normally be reached on Monday through Thursday and every other Friday from 7:30 PM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley, can be reached on (571) 272-6917. Any inquiry of a general nature

or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Colby M. Hansen

Patent Examiner

6/21/06

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER